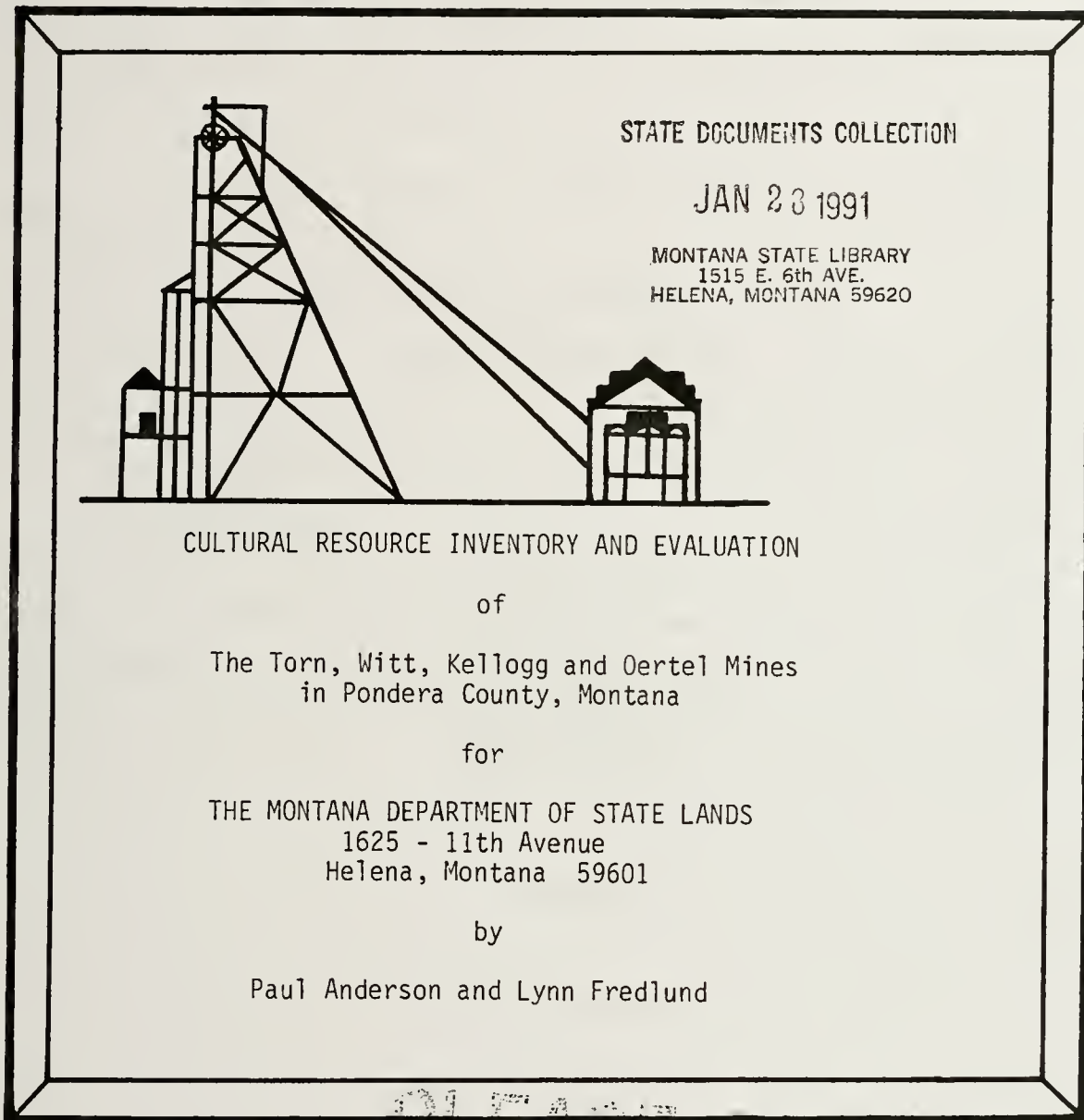


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1986 and evaluation of  
the Torn, Witt,  
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CULTURAL RESOURCE INVENTORY AND EVALUATION  
of the Torn, Witt, Kellogg and Oertel Mines in Pondera County, Montana

for

The Montana Department of State Lands  
1625 - 11th Ave.  
Helena, Montana 59601

by

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and Lynn Fredlund

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GCM Services, Inc.  
P. O. Box 3047  
Butte, MT 59702

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February 1986

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## INTRODUCTION

In November of 1985 GCM Services, Inc., in Butte, Montana was contracted by the Montana Department of State Lands (DSL) to perform a cultural resource inventory and evaluation of selected abandoned coal and hardrock mines in Montana.

This report presents the results of the inventory of four abandoned coal mine sites in Pondera County, Montana (Figure 1).

In the interest of public safety and health, the DSL, as part of its abandoned mines reclamation project, plans to permanently seal mine openings and either remove or reclaim coal waste dumps. Any hazardous structures on the sites would also be removed.

The following report describes the physical setting, historic background and present condition of the following mine sites: Torn (24PN25), Witt (24PN26), Kellogg (24PN27) and Oertel (24PN28). All the mine sites are in close proximity just south of Lake Frances in Pondera County. An evaluation of each site's potential eligibility for the National Register of Historic Places and a summary of projected impacts is also given.

Official site inventory forms are on file in the state site files at the Department of Anthropology, University of Montana and are reproduced in Appendix I.

Field investigations were conducted during the autumn of 1984 by Lynn Fredlund. Principal investigator for the project is Paul Anderson.

All field notes, photographs and supportive information resulting from the cultural resource fieldwork will be maintained at the office of GCM Services, Inc., Butte, Montana.

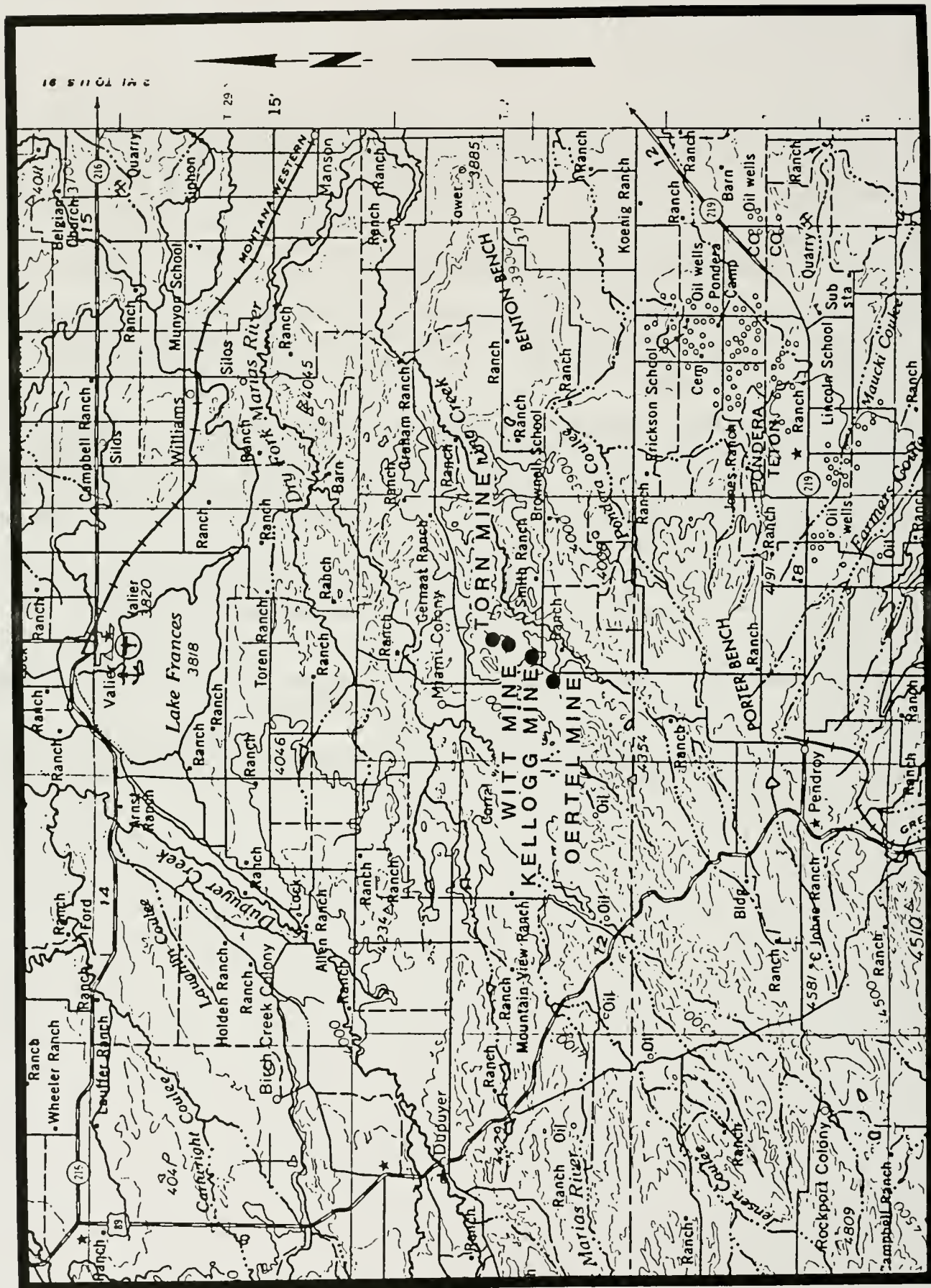


Figure 1. Map of the project area mine sites. (from U.S.G.S. Cut Bank, Montana 1:250,000 - 1964.

LEGAL DESCRIPTIONS OF PROJECT SITES

Torn: SW1/4 SE1/4 Section 16, T28N R5W

Witt: NW1/4 NE1/4 Section 21, T28N R5W

Kellogg: NE1/4 SW1/4 SW1/4 Section 21, T28N R5W

Oertel: NW1/4 NW1/4 NW1/4 Section 28, T28N R5W

## METHODOLOGY

The inventory and recording of cultural resources is designed to meet all legal requirements of the National Historic Preservation Act 1980 Amendments and other applicable federal and state laws and guidelines. The information is designed to provide all necessary data to allow agency review for National Register of Historic Places (NRHP) eligibility and a determination of the effects of the proposed action.

Prior to the initiation of fieldwork the state site files at the University of Montana, Montana Historical Society's Historic Preservation Office files, and the Montana Fish and Game Commission's Historic Sites Compendium were searched for previously recorded sites in the area. The Bureau of Land Management's records division in Billings, Montana was consulted for relevant GLO plat maps, historic survey plat maps and historical indices showing site ownership and historical features in the vicinity.

The four sites were carefully examined through a pedestrian inventory following standard archeological survey procedures. Pedestrian surveys are designed to provide the most complete coverage of an area possible. Undisturbed areas were systematically examined for possible prehistoric activities. At many of the mine sites, large areas have been severely disturbed by mining operations and had there been any prehistoric cultural materials they would have long since been buried or destroyed.

All sites located are recorded on standard site forms and are assigned a site number by the state site files office at the University of Montana under the trinomial system of the Smithsonian Institution. Each site is examined, structures measured and a sketch map drawn showing the location of artifacts, cultural features and/or structures and their relationship to natural features within the site area.

Collection of artifacts is limited to diagnostic or patterned tools on prehistoric sites and selected artifacts on historic sites which might aid in dating the site.

Subsurface testing is conducted in order to establish the presence or absence of buried cultural materials. The need for testing on prehistoric sites is determined on a site by site basis at the discretion of the project director. Testing of historic sites is generally dependent on pre-fieldwork review of the literature which might indicate the presence of significant features or structures.

Each site is photographed in black and white negative and color positive film. On historic sites all features and structures are photographed to show significant aspects in detail.

Personnel engaged in reclamation work at these sites should exercise caution so as not to disturb the remaining structures and features on the sites.

### Results of the Site Files and Records Search

The search of the state site files by the Montana State Historic Preservation Office and a perusal of the Montana Fish and Game Commission's Historic Sites Compendium (1975) did not reveal any prehistoric or historic sites within the immediate vicinity of the project area.

However, the Historic Sites Compendium does show two historic sites within the general region of the four coal mines. Some twenty miles to the northwest is the location of the townsite of Robare which the Compendium describes as a "...lawless frontier town...on Birch Creek [which] flourished during the years of 1870-1900, partly on illicit whiskey trade. In 1885, a party of horse thieves was surrounded in a small cabin, jailed and hanged from a cottonwood tree on the creek. The Town consisted of a blacksmith shop, livery stable, two trading posts, an inn, four saloons and some small cabins." Another important historical site is the location of the Two Medicine Fight site where Lewis' party - of the Lewis and Clark Expedition - during their return journey fought a skirmish with a band of Piegan-Blackfeet Indians in 1806. Two Indians died in the fight and Lewis was nearly killed. The incident marked the beginning of a long-lasting enmity between the Blackfeet and whites (Compendium 1973:101).

A search of the state site files by the Historic Preservation Office of the Montana Historical Society revealed no historic or archeological sites in the immediate vicinity of the project area.

## GENERAL FEATURES AND PHYSIOGRAPHY OF THE PROJECT AREA

The project area lies within the plains and mountains region which comprises the central part of Montana (Perry 1962). The project area is within sight of the Rocky Mountains rising to the west from Glacier National Park, the Great Bear and Bob Marshall wilderness areas. Numerous streams and rivers flow eastward out of the mountains while smaller perennial and intermittent streams flow in a generally southwest to northeast direction in the immediate vicinity of the project area. The two streams adjacent to the coal mine sites are the Dry Fork of the Marias River to the North and Spring Creek to the south. A few miles north is Lake Frances which is one of the area's larger bodies of water. The entire region was once scoured by the glaciers of the Wisconsin ice age and now consists of rolling wheat and grazing lands. The principal towns in the area are Conrad to the east, Pendroy to the south, Dupuyer to the west and Valier to the north.

### Climate

The area's climate is typical of much of the northern plains region with bitterly cold winters and short but hot summers. Much of the day-to-day weather patterns are shaped by the topography of the nearby mountain ranges which take much of the moisture from the prevailing Pacific weather systems coming from the west. The warm "chinook" winds are a frequent phenomenon along the eastern slopes of the Rockies during the winter. Temperatures during the winter can fall to 40 to 50 below zero F with an average of 40 days of 0° F or colder. Summer temperatures are generally warm with an average of 26 days a year where the temperature is 90° or higher. Seasonal transitions can be very rapid. Average precipitation for the area varies between 10 and 14 inches per year with the usual wet season coming in the spring and early summer.

### Vegetation

The project area is within the Northern Grasslands region (Payne 1973). Much of the region is under cultivation for wheat and hay. Wild species of prairie grasses include: needle and thread, blue grama, western wheatgrass, junegrass, green needlegrass, threadleaf, clubmoss, sagewort, saltgrass and porcupine grass. Patches of sagebrush are found throughout the region while patches of Rhus are found in drainages and near areas of surface water. Few trees grow in the open range areas but cottonwood, willow and underbrush are found along stream banks.

### Geology

The general features of the project area's geology are briefly summarized by Eugene Stebinger as follows:

The geologic formations in the region here described are all sedimentary in origin and range in age from Lower Cretaceous to probably basal Tertiary. All the rocks are apparently

conformable, there being no recognizable break or disturbance between any of them or any evidence that points to the existence of an important erosion interval. The sequence of the formations in the Upper Cretaceous part of the section is different from that so far described for any other locality in Montana, owing to the fact that in this region the marine invasion represented by the Claggett shale did not extend so far west as the present position of the Rocky Mountain front between latitudes 48° and 49° N.

Two of the formations, the Colorado and Bearpaw shales, are unquestionably of marine origin and were laid down during separate epochs in which a comparatively shallow sea covered the entire region. The remaining formations are mainly of continental origin-that is, they are irregularly bedded rocks that were for the most part rapidly deposited by stream and wind action over land areas that were only slightly above sea level and thus afforded the marshes and swamps necessary for the accumulation of the vegetable matter forming the coals now found in these beds (Stebinger 1916:123).

## CULTURAL BACKGROUND

### Prehistory

The prehistory of Teton and Pondera Counties is part of the Northwestern Plains cultural and archeological area as discussed by Lynn Fredlund in the Class I inventory (GCM 1983). Common types of prehistoric sites expected include: lithic scatters, stone circles, and stone alignments -- all using the ever present tertiary or pleistocene gravels, and bison kill sites -- commonly using the steep river terrace edges as locations for jumps. The extensive use of the gravels for forming stone features is thought to have begun about 2000 years ago. Stone circles are generally the remains of dwelling units and sites can be found with hundreds of these features. Stone rings have and are still receiving considerable study, e.g., Davis 1983; Davis et al. 1982; Deaver 1983; Fredlund et al. 1984; Finnigan 1982; Kehoe 1960, Quigg and Brumley 1984. Lithic studies examining the uses and technology of using and making tools with the cobbles have and are being conducted, e.g., Finnigan 1985, Hanchette and Deaver 1983. Bison kills in the general area have been excavated and numerous studies have been conducted on these sites which represent evidence of prehistoric communal subsistence strategies in the northern plains, e.g., Kehoe 1967; Keyser 1979; Lewis 1947; White 1951, Reubelmann 1981.

The one site type that has not been studied in detail is stone alignments. Stone alignments sometimes consist of single stones in a line but more commonly an alignment of rock piles or cairns. The individual cairns can be made up of anywhere from two rocks to hundreds. In alignments they are generally associated with kill sites and represent lines which were established to utilize the topography and manipulate bison (or other animals) toward an impoundment or kill area. In the area of concern here most of the drive lines were used to channel bison over high terraces where the animals would fall, breaking legs, so they were easily killed. The use of rocks to form drive lines is common to the area under study but other materials were used as well, e.g., as stacked dried buffalo chips, brush, logs, banked-up snow or people only (ethnographic and ethnohistoric information summed up by Verbicky-Todd 1984:112). Obviously, only the rock piles are likely to remain to become part of the archeological record.

Drive lines to bison kills are commonly discussed as being V-shaped (White 1951) but many are extremely complex. Frison (1978:231) states that driveline systems are "composed of two parts. The part designed to bring a herd into the final stampede...(and) the final drive lines...(which) usually consisted of two straight lines that converge at the jump-off point". Lewis, an amateur archeologist who documented many of the bison kills in Montana in an unpublished manuscript written in 1947, discusses drive lines along Two Medicine Creek in terms of their proximity to an actual kill site and the complexity and sophistication of the alignments and use of topography:

If the rock lanes are an indication of the location of the kill proper, it would seem that one would need only to follow a lane in the right direction to its end in order easily to locate the point of kill. Or one might assume that the two lanes converging on a spot would likewise easily locate the spot. Unfortunately, the nice arrangement of converging lanes is seldom found in this idealized

arrangement. One may follow a lane a considerable distance, only to have it utterly disappear in the midst of the prairie. Or some may be following a lane and convincing himself that the proper direction is straight ahead, only to meet another lane appearing from some unexpected angle, and upsetting his theory of direction completely (Lewis 1947:15).

The Two Medicine Kill is to be found some ten miles east of the puzzling rock lane complex.

The Two Medicine River here takes a direction almost straight east. From the place where the north-south Glacier Park Highway #59 crosses the Two Medicine to where the same highway crosses the Big Badger River to the south is approximately six miles. The Big Badger runs in a general easterly direction but bearing to the north, and entering the Two Medicine about eleven miles below the highway bridge. Both rivers run through deep gorge-like valleys, the river bottoms of which are two to three hundred feet below the table land between. The kill is located on one of the promontories extending northward from the flat iron-shaped area pointing eastward to the junction of the rivers. Actually the kill is on the Two Medicine, about a mile above the junction (with the Big Badger River). With a prevailing west wind the animals would naturally drift east when disturbed, and hunters could easily take advantage of this by following up the two valleys on each side of the herd, thus preventing their scent from disturbing the animals until hunters were ready to drive or stampede them by closing in behind the herd from the mountain direction westward. It will thus be evident that the herd might be driven over the Two Medicine cliff which borders its south bank practically anywhere along a distance of fifteen miles or more, and similarly they might be driven over the other bank cliff bordering the Big Badger on the parallel stretch. The problem was to keep the herd moving eastward until the selected cliff promontory was reached. But it was found that deep side coulees entered both river gorges, hence if the herd following too closely the rim of either river and suddenly came upon one of these deep side cuts they would be dropped into this slot. It was then necessary to steer the drive around this spot, pushing them southward from the Two Medicine rim around this obstacle. To do this a series of two or three parallel rock lanes were laid just west of the side cut, varying at intervals as apparently seemed desirable, extending in a northwest-southeast direction, and branching from the Two Medicine rim to the south end of the coulee. Here buffalo running from the west might be expected to veer southward enough to round the side coulee. About one mile east of the highway bridge a peculiar land contour occurs in (the) form of a round hill, the north side of which approaches the Two Medicine rim. If the herd rounded this moraine hill on the north side they would be pushed off the rim at this point. But to the south of the hill a broad level valley like route opened up to the east. Rock lanes were therefore laid on the west side of the hill at the proper distances from the obstruction hill and in a manner apparently to turn the herd to the south of the present ground and into the desirable level route.

The longest lanes parallel roughly the rim, sometimes on the very edge, at others a half mile or so from it, but always in a manner to contribute to controlling the direction of the run of one herd. There was no hint even of the rock lane arrangements being "V" shaped, as is often stated. One may argue that the table land itself forms a natural "V", but even so the area, covering a hundred square miles all told is sufficiently large to permit "V" arrangements to be constructed from rock lanes in a dozen favorable places (Lewis 1947:16-18).

The above quote is an excellent description of the complexity of drive lines. More detailed study is now being conducted at other sites to try to better describe and understand the strategy behind the massive rock alignments.

Recent work at the Head Smashed In bison kill in southern Alberta, a site being developed by the provincial government of Alberta, is producing some detailed documentation of the drive lines leading to the kill. The drive lines begin in the large gathering basin and some lead to the main kill while others steer past the main kill and lead to one of a suite of other kill sites in the area. They overlap and cross each other. There are no stone circles within the driveline complex but there are some unverified ethnohistoric sources which state that tipis were placed above the area of the main kill. More detail on the drivelines will be forthcoming in studies which are in process by Brian Reeves and in an M.A. thesis by Maureen Rollans, University of Alberta (Milt Wright, archeologist, Archaeological Survey of Alberta, personal communication).

Drive lines are known from all over the northern plains but because of the emphasis on rock features in the northern glaciated prairie more are recorded for this part of Montana than in other areas of the state.

### History

The four tribes of the Blackfeet Nation lived within the area which is now southern Alberta and Northern Montana east of the Rocky Mountains. The protohistory and history of the area encompassing the survey units begins with the Blackfeet. White history begins with the explorers, trappers and traders moving into the area during the 18th century.

Written history begins here, as with most of Montana, with Lewis and Clark who passed on horses parallel to and south of the Marias River on July 26, 1806. They mention crossing Willow Creek and Two Medicine (Lodge) Creek and up to Badger Creek, the first major tributary of Cutbank River above the headwaters of the Marias (Coues 1965; West 1964).

During the 1840s to 1880s the buffalo were killed off and the Blackfeet eventually forced onto reservations around 1882. This opened the region to an influx of white trappers and traders. The most important post for this trade at Willow Rounds - a favorite Indian wintering ground - located on the Marias River, about five miles east of its headwaters junction with the Cut Bank Creek and Two Medicine River. Willow Rounds was an important post since it was the first large flat area above the floodplain which was near the headwaters of the Marias and the boundary of the Blackfeet Reservation. At this location there

were a series of posts: Augustin Hamell (Armell) 1848-1856; Northwest Fur Company 1868-1870; I.G. Baker and Co. 1868?-1870; John W. Power 1876; and Charles Aubrey trading for T.C. Power 1877 (Hamaker 1984). Friends of these early traders who came to Willow Rounds include James Willard Schultz and trader Joseph Kipp. Willow Rounds was on the Healy Trail, a short cut to the Whoop-up Trail from the Choteau area. The Whoop-Up was one of the infamous "whiskey trails" used to smuggle whiskey for sale to Indians in Canada.

Settlers moved into the region in the 1880s and 1890s as the Indian danger abated. On the Marias at Willow Rounds, Solomon Abbot and Henry Powell first settled in 1882. Soon the headwaters area, near "The Inside Trunk" (the Indian name for Reservation Point) between Two Medicine River and Cut Bank Creek" was settled by the Sullivan family (Hamaker 1984:18). Later the Wilkins, who came from England, also settled the area. The two ranches are on the river flood-plain and later both families were flooded out and one schoolhouse was carried off by high waters of the Marias. In 1890 the first school was started at Willow Rounds which was attended by children of the Sullivan family. For the Marias Valley a pattern of ranch life had begun.

Near Valier Charles E. and William G. Conrad owned and controlled 11 sections of land known as the Seven Block Ranch. In order to actually get claim to the land under the Desert Land Act they needed to irrigate it. They hired M. S. Darling, an engineer, who constructed a 50-mile long ditch system under the Conrad Investment Company. They also organized the Pondera Canal Company which diverted water from Lake Frances down the Dry Fork of the Marias to the town site of Conrad. Water for the Reservoir was brought in from Birch Creek and Dupuyer Creeks. These ditch companies and others and opened up the land for farming and hay. These ditches were and are still a lifeline of water for the area.

The first coal mine in the vicinity of the project area was begun by John Devlin who was reported to have found a good seam of coal on a hill next to "Dry Fork...near the old McCraig ranch about 18 miles west of Conrade" according to the Conrad Observer of December 30, 1909. The article said the mine had already followed the 25 inch seam some 85 feet and five men were employed. Over the next two decades other similar small commercial mines would be opened until there were about 25 mines which operated in the region and furnished employment for as many as 125 men (Pondera History Association; Conrad Observer December 30, 1909).

Most of the mines were either slope or shaft mines which were sunk about 50 to 60 feet to reach the two coal seams. One seam was about a foot thick while the other was only six inches. To make the mining even more difficult and dangerous, the two seams were separated by a one to two foot thick layer of slag. Miners had to either kneel or lie on their sides to dig the seams which were worked from rooms on either side of the main tunnel. Extensive timbering was necessary to shore up the workings. Even so, three men lost their lives working in the mines when they were in production. For this hard, dangerous work the miners received an average of \$3.75 a ton which sold at the mine for about \$6.50. The area mines, such as the Torn, Witt, Kellogg and Oertel, were a locally important industry, providing jobs as well as cheap fuel during the hard times of the 1930s (Pondera History Association 1973).

Besides coal, the other mineral of significance in this region was oil. The first producing well was drilled in 1927 in Section 16, T27N R4W. Within a short time, other wells were drilled by Continental Development and Texas Pacific Coal and Oil. The prevalence of tar paper shacks for workers in the initial development of the Pondera Field was known as Gallup City. This assortment of shacks was named for the ex-governor Hugh Aaronson (known as "The Galluping Swede") who built them for his drilling crews (Pondera History Association 1973).

The growing oil boom was brought to a halt by the stock market crash in 1929 and development did not resume until the 1940s. In 1947 Phillips Petroleum Company bought the properties of A.B. Cobb, leaving Phillips - along with independent producers Ted Hawley and Keith Tyner, Jr. - in control of most of the 294 producing well in the Pondera oil field.

Other producing fields have been developed - including the Lederer Pool, the Kellogg-Brownell Pool, the Gypsy Basin Pool, the South Cut Bank Field and the North Brady Pool - and the future potential of the Pondera oil fields is rated as very good by geologists and oilmen (Pondera History Association, 1973).

## Historic Site Narratives

Site: Torn Mine 24PN25

Location: SW1/4 SE1/4 of Section 16, T28N R5W

Area: 16,000 m<sup>2</sup>

Elevation: 1230 m (4040 ft)

Description: The Torn Mine is situated on gentle eastward sloping grasslands leading to Spring Creek (Figure 2). The remains of the mine consist of a large tailings pile near the underground entrance to the mine and two smaller piles to the southeast. Remains of the tibble, scale and various machinery parts were observed (Figure 3). A depression marks the remains of the air shaft. A cement foundation is all that remains of the scale. The mine associated buildings and most of the equipment has been removed through the years.

Structures and Cultural Materials: The primary features at the site are the main tailings pile and the two outlying tailings piles. The more recent mine operations by Garrett Torn in the 1930s created the main tailings. The shaft was on the west wide of the pile, and the tibble and loading chute were on the east side. The coal was hauled up the tailings pile and over the other side to the trucks. The main tailings pile is at least 10 m above the surrounding terrain. A filled in 1.3 m x 1.3 m air shaft (now a shallow depression) is on the southwest edge of the tailings pile while the cement scale foundation is on the southeast edge. The scale foundation of poured cement is 3 m x 4 m. The building over this foundation has been removed along with almost everything else. On top of the tailings pile are the wooden remains of miscellaneous structures, plus the ties and sections of the rails.

There are few recognizable artifacts around the Torn Mine other than the rails and wooden remains of the coal delivery system.

Historical Development: The Torn Mine was a typical, small commercial coal mine similar to the some two dozen other mines which operated in the area during the productive period of the coal field. The land on which the mine is located was located on a school section. The mine, however, was owned and operated by Garrett Torn.

The mine was first opened during the early 1930s and operated through the decade, closing for good when the U.S. became involved in World War Two. From 10-12 men were usually employed in the mine digging the narrow coals. The common method of the room-and-pillar technique appears to have been used in the mine. Extensive timbering was necessary in the mine due to the presence of a thick layer of muck or slag between the two coal seams which made the workings very unstable. No one, however, was reported to have been killed or badly injured in the Torn Mine during its period of production (Pondera History Association 1973; Elwanger 1984; BLM Patent Records).

Evaluation: The site is in poor condition with little remaining from the original mining operation.

National Register Statement: Because the buildings and the equipment have been removed, the site lacks physical integrity. The significance of the Torn and the other mines in this area was that they supplied coal to the local area and were a major employer during the hard times of the 1930s. Although of some importance to the local history the lack of physical integrity suggests that the site is not eligible for the National Register of Historic Places.

Management Recommendations: The DSL plans to fill in the mining shafts and the air shafts and possibly clean up the tailings piles. This will effectively remove most of the mine remains. The site has been recorded, mapped and photographed and no further work is recommended.

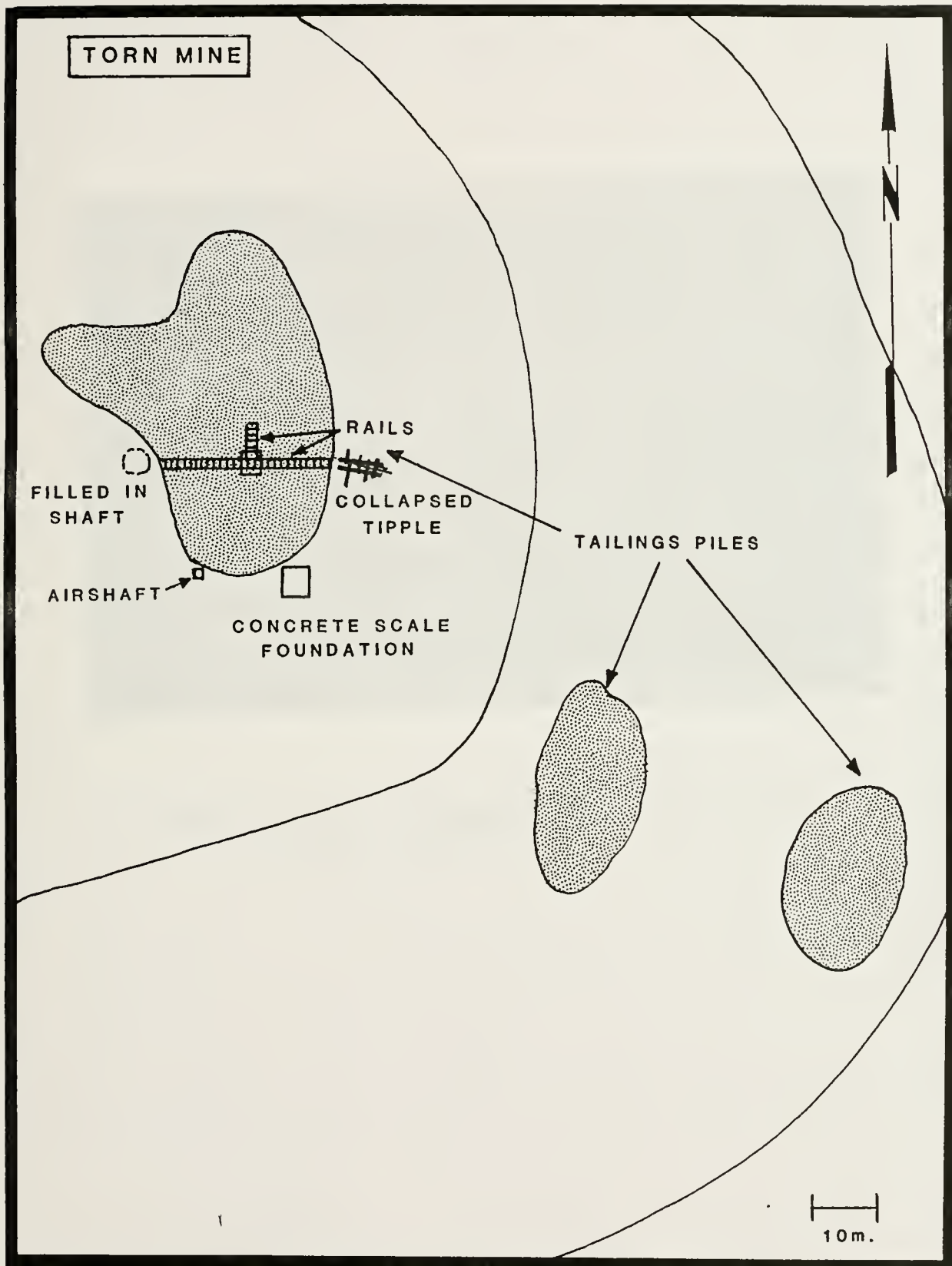


Figure 2. Site map of the Torn Mine (24PN25).





Figure 3. Rails and collapsed tipple at the Torn Mine  
(view to the east).



Site: Witt Mine 24PN26

Location: NW1/4 NE1/4 of Section 21, T28N R5W

Area: 15,000 m<sup>2</sup>

Area: 1220 m (4000 ft)

Description: The Witt Mine is situated on gentle eastward sloping grasslands leading to Spring Creek (Figure 4). The cistern, air shaft, and two dugout foundations are on the edge grassy ridge to the north of the mine (Figure 5). The remains of the mine consist of a large tailings pile near the underground entrance to the mine. Remains of the tipple, rails and various machinery parts are nearby. The mine associated buildings and much of the equipment has been removed through the years.

Structures and Cultural Materials: The primary feature of the Witt Mine is the tailings pile which are 10 m above the ground surface. The pile has an indentation from the east where the old scale and tipple were located. Also on the tailings is the remains of the shaft header and the collapsed/filled in shaft. Coming from the shaft to the south are the rails. The rails at the Witt Mine are interesting in that they are not true rails but galvanized pipe attached to 2" x 6" boards. Remains of the tipple, in the form of boards and timbers, are visible on the top of the tailings.

Other features include:

1. Dugout foundation in the hillside which was the cookhouse. This is on the south slope of the grassy ridge north of the mine itself. A cookstove and cement entrance slab remain. The function was attested to by Floyd Elwanger, an old time resident of the area. The dugout area was 4 m x 5 m.
2. Depression which is filled in air shaft. The airshaft was 1.2 m x 1.2 m was 90 ft deep. It is just west of the cookhouse.
3. Dugout area 6 m x 6 m had a structure built over the top which was sort of a garage according to Elwanger. This is west of the airshaft also on the south side of the ridge.
4. Cement cistern. This feature is 2.8 m in interior diameter and 3.9 m outside diameter. A wooden frame (.6 x .6 m) in the top center provides a view of the interior, as does a broken edge. It is approximately 2.5 m deep. The cistern was constructed on site and the remains of the form are still visible on the northeast corner of the tailings pile.

Several artifacts are of interest to the Witt Mine operations. One broken coal car, pieces of an old truck, a small scale for weighing the individual coal cars, a "Faultless Malleable" cookstove, and the 1925 Chevrolet truck frame and motor which served as the motor for the mine hoist.

Historical Development: The land on which the Witt Mine was located was first patented by Cora B. Helms ("formerly Cora B. Lampham") on January 20, 1914 as a homestead entry (#510096). The mine, however, was not developed until some years later being an active producer during the 1930s. The mine was begun by

Glen Witt but was reported have been under a number of different owners although a Mr. Brewster was the principal operator/owner during the mine's active period. Like most of the other small, commercial mines in the area, the Witt employed from 10 to 12 men who produced about 15 to 20 tons of coal a day from the seam some 50 to 60 feet deep. The coal was of a high sulphur content but was also high in heat value and provided an economical fuel to the area's residents during the hard times of the 1930s. The Witt and the other similar mines were also important for the jobs they provided. Many of the seasonal miners were local farmers who needed to supplement their meager farm incomes. The mine operated for about a decade, closing for good during the early 1940s (Pondera History Association 1973; Elwanger 1984; Oertel 1986; BLM Patent Records).

Evaluation: The site is in poor condition with almost nothing remaining of the mining operation.

National Register Statement: Because the buildings and equipment have been removed the site lacks physical integrity. The significance of the Witt and the other mines in this area was that they supplied coal to the local area and were a major employer during the hard times of the 1930s. Although of some importance to the local history the lack of physical integrity suggests the site is not eligible for the National Register of Historic Places.

Management Recommendations: The DSL plans to fill in the mining shafts and the air shafts and possibly clean up the tailings piles. This will effectively remove most of the mine remains. The site has been recorded, mapped and photographed. No further work is recommended.

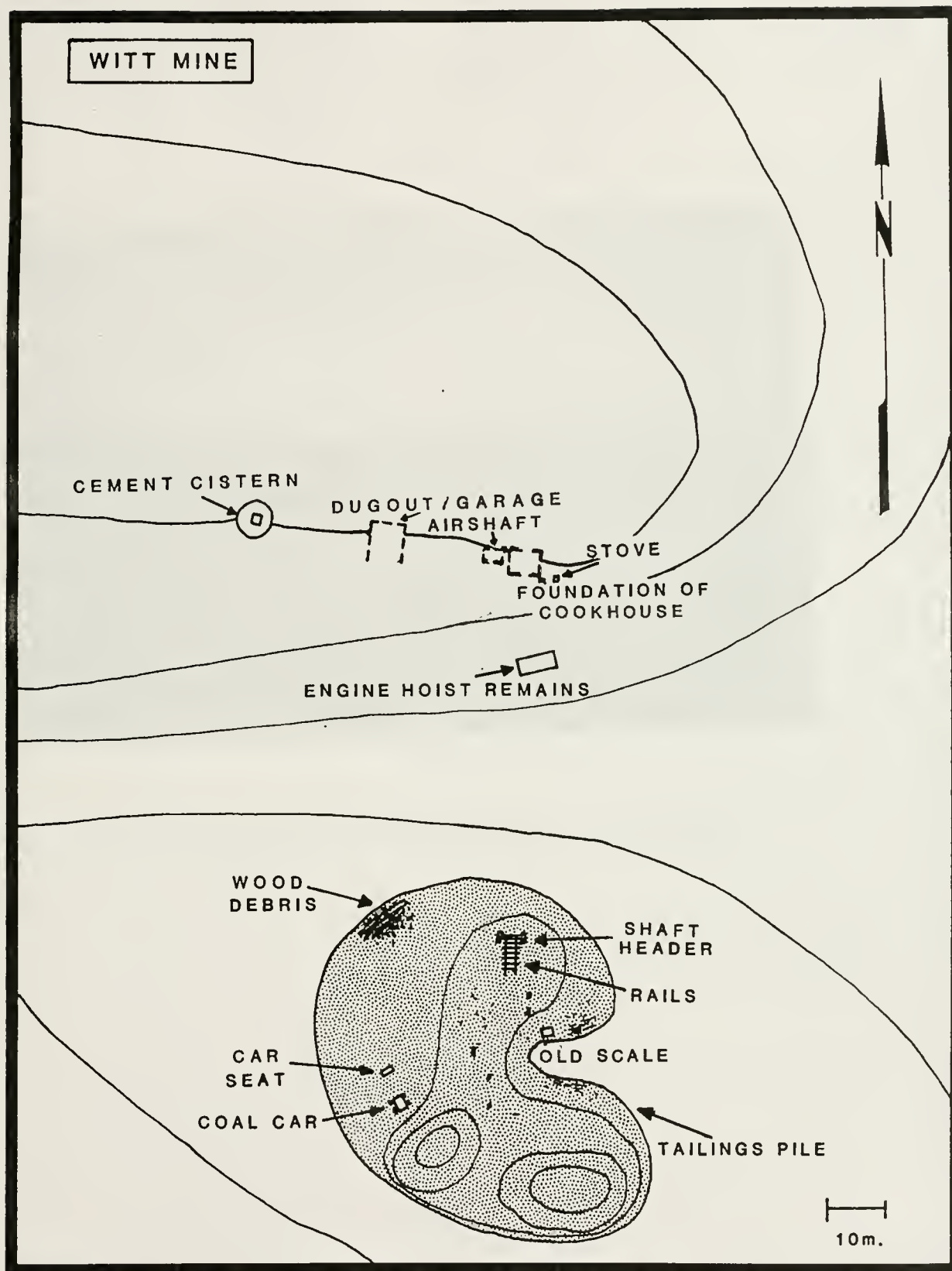


Figure 4. Site map of the Witt Mine (24PN26).





Figure 5. Remnants of the Witt Mine (view to the north).



Site: Kellogg Mine 24PN27

Location: NE1/4 SW1/4 SW1/4 of Section 21, T28N R5W      Area: 20,000 m<sup>2</sup>

Elevation: 1225 m (4020 ft)

Description: The Kellogg Mine is situated on gentle eastward sloping grasslands leading to Spring Creek (Figure 6). The remains of the mine consist of a large tailings pile near the underground entrance to the mine (Figure 7). Remains of the tibble, scale and various machinery parts are nearby. Depressions mark the remains of five buildings and an air shaft. Approximately 100 m northeast is another tailings pile. Two standing structures, a small dwelling and a granary, are not related to the mining operations. The mine associated buildings, much of the equipment and some of the tailings have been removed through the years.

Structures and Cultural Materials: The features at the site consist of eight depressions, one concrete motor mount, the remains of two tailings piles, the remains of the scale and two standing structures. The standing structures are both 2 m x 4 m and cedar shingle sided. One is the dwelling of Floyd Elwanger, who once owned the Kellogg and the other is a granary. Neither was part of the Kellogg Mine facilities when the mine was in operation.

Other features include:

- Feature 1. Dugout foundation for the Kellogg/Hansman house. The foundation is approximately 4 m x 6 m. The house was moved to the Angelo's farm south of the site.
- Feature 2. Dugout area 2 m x 2 m. Function unknown.
- Feature 3. Dugout area 9 m x 6 m. Elwanger reports that this was the bunkhouse. This structure apparently was also moved and is at the Angelo farm.
- Feature 4. Depression of approximately 8 m x 8 m. This is the filled in shaft of the Kellogg Mine. At its extreme west-southwest end it abutted the Oertel Mine property. Depth of the shaft is unknown but it slanted back into the hillside. The length of cable on the hoist was 200 ft and fully extended into the underground operations, according to Elwanger.
- Feature 5. Area of the scale. Wooden remains of the scale foundation are 7 m square. Portions of the roof, possibly of the scale house, are to the south and include the rafters.
- Feature 6. Depression 3 m x 4 m. This, according to Mr. Elwanger, was where one of the converted oil field "cookhouses" once stood. These were apparently used as trailers by families. This one was sold to the Hutterites.
- Feature 7. Depression is 4 m x 6 m. The building which stood here was one of the dwellings of the Kellogg family. This was moved to the Angelo's farm.

Feature 8. A slight depression which represents the filled in air-shaft. The shaft is 53 ft deep. The other airshaft is in the cultivated field to the south, according to Elwanger.

The main tailings pile is oriented according to the direction of the shaft -- southwest/northeast. It is approximately two meters high and has a dugout area for loading in the center. The shaft is at the southwest end and rails still lie on top of the pile. The remains of the tibble and the scale are visible at the east end. The hoist still remains and was powered by a 1928 Chevrolet truck motor.

There were many pieces of machinery, an old threshing machine, grain grinder, old trucks, a sign, and assorted scrap metal. Most of the machinery and anything possibly salvagable has been removed.

Historical Development: The Kellogg Mine was run by Les Kellogg and employed at least a dozen men during the 1930s. The Kellogg Mine was the largest of the seven or eight mines which dotted the area. The mine was first opened around 1930 although the land had been patented about 15 years earlier by Charles B. Sanborn who obtained a homestead entry (#378274) on January 20, 1914. The mine was started by Les O. Kellogg and at peak times as many as 25 men worked the mine. Shortly after it opened the mine suffered a fatal accident when Theodore Vandepas was killed in a cave-in. At this time the main tunnel of the mine was reported to be 300 feet in length (The Independent Observer June 12, 1930; BLM Patent Records).

On the surface there were about six shacks for the miners who had families, a bunk house for the single miners and a cook house. Coal was sold at the mine to customers who drove their own wagons or trucks. They paid about \$6.50 a ton for the coal but those who arrived around noon were also invited to a free lunch. Coal was also delivered to area towns and farms by Glen Kellogg in a three-ton truck for an additional \$2.00 per ton charge.

The mine, like most of the others, closed in the early 1940s but then was bought by Floyd Elwanger in February, 1945. Elwanger hoped to resume operations and began cleaning out the mine but then his health failed and he was forced to abandon the project (Pondera History Association 1973; Elwanger 1984).

Evaluation: The site condition is poor with little remaining of the original mining operation.

National Register Statement: Because the buildings, the equipment and some of the tailings have been removed the site lacks physical integrity. The significance of the Kellogg and the other mines in this area was that they supplied coal to the local area and were a major employer during the hard times of the 1930s. Although of some importance to the local history the lack of physical integrity suggests that the site is not eligible for the National Register of Historic Places.

Management Recommendations: The DSL plans to fill in the mining shafts and the air shafts and possibly clean up the tailings piles. This will effectively remove most of the mine remains. Although impact through the mine reclamation will remove most of the remains of the Kellogg Mine there is no further information to be gained from the physical remains. The site has been recorded, mapped and photographed and no further work is recommended.

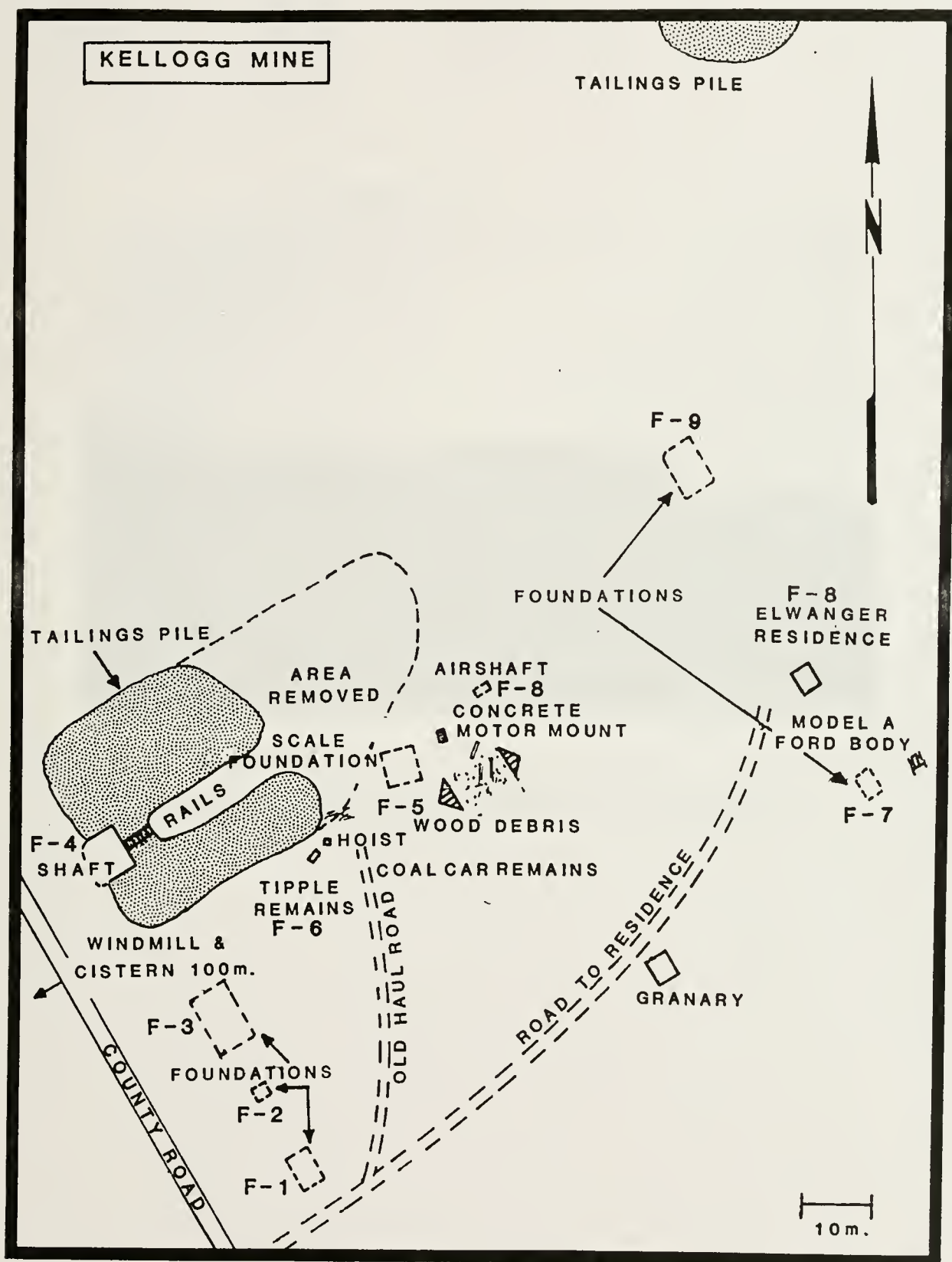


Figure 6. Site map of the Kellogg Mine (24PN27).





Figure 7. Coal slack pile and remains of the Kellogg Mine  
(view to northwest).



Site: Oertel Mine 24PN28

Location: NW1/4 NW1/4 NW1/4 of Section 28, T28N R5W

Area: 1000 m<sup>2</sup>

Elevation: 1240 m (4080 ft)

Description: The Oertel Mine is situated on eastward sloping grasslands leading into the Spring Creek valley (Figure 8). The county road runs just east of the mine area. Two depressions, and some wood and metal. The air shafts were filled in and the tailings removed by the county. Only scattered slag and debris mark the existence of Oertel.

Structures and Cultural Materials: Three features were visible on this site. The first is a depression which, according to Floyd Elwanger, was one of the deep air shafts which was filled. It is surrounded by a surface cover of coal slack indicating that at one time this was an area where the tailings were dumped. Remnants of the tippie are a few meters southeast of the slack (Figure 9). To the south of the airshaft (30 m) is a 6 m diameter hole which is used as a dump. It probably had something to do with the mine but its function is not known. Below the dump is a small slag pile. Floyd Elwanger said that all the tailings have been removed from the Oertel over the years.

The material remains of the Oertel are very limited. Besides the modern dump there is a bed frame near the air shaft and some wood boards and timbers.

Historical Development: The Oertel Mine was owned and operated by Paul O. Oertel who started the mine around 1927. The land on which the mine was located, however, was first acquired by Earl M. Gilson under a homestead patent (#531519) on May 31, 1916. The incline shaft was sunk 190 feet, according to Oertel's son, Lester Oertel, at a 35° incline to reach the coal seam about 50 to 60 feet below. The mine workings extended 200 to 300 feet from the shaft and a type of long-wall method was used where the seam was mined from long rooms on each side of the four-foot high main drift. The coal was found in two seams. The bottom seam was about a foot thick while the top was about six inches and they were separated by a foot to two foot thick layer of slag or muck. Lester Oertel, who worked in the mine, said the bottom seam would be removed first by the miner who had to lay on his side. Then the waste layer would be taken out and finally the top coal seam would be taken out by the miner who, at this point, at least had room to kneel. No machines could be used because of the cramped space and the mine cars had to be pushed by hand. Oertel reported that blasting was seldom used but occasionally it would be done using black powder wrapped in Saturday Evening Post magazines. Ventilation for the mine was by an air shaft and like most of the other mines in the area there was no forced air system in use which resulted in such poor air at the workings that miners sometimes had trouble keeping their carbide lamps lit (BLM Patent Records; Oertel 1986).

However, in spite of the difficult, dangerous work, the mine did provide jobs for eight to ten men during the hard-pressed 1930s. For their work the miners received an average of \$3.75 per ton. Since each man was able to mine about one to one and a half tons a day, their daily wage ran about four to five dollars which was an important source of income for miners and area farmers who supplemented their meager incomes by also working in the mine (Pondera History Association 1973).

The Oertel had a somewhat troubled history. A number of serious injuries occurred in the mine and in 1938 Charles Preston was killed in a cave-in. The mine continued to operate through the 1930s, however, but like the others it closed around 1941 (Oertel 1986).

Evaluation: The condition of the site is poor. Almost nothing remains of the original mine

National Register Statement: Because the buildings, equipment and all of the tailings have been removed the site lacks physical integrity. The significance of the Oertel and the other mines in this area was that they supplied coal to the local area and were a major employer during the hard times of the 1930s. Although of some importance to the local history the lack of physical integrity suggests that the site is not eligible for the National Register of Historic Places.

Management Recommendations: The DSL plans to fill in the mining shafts and the air shafts and possibly clean up the tailings piles. This will effectively remove most of the mine remains. There is almost nothing left of the Oertel and there is no further information to be gained. No further work is recommended.

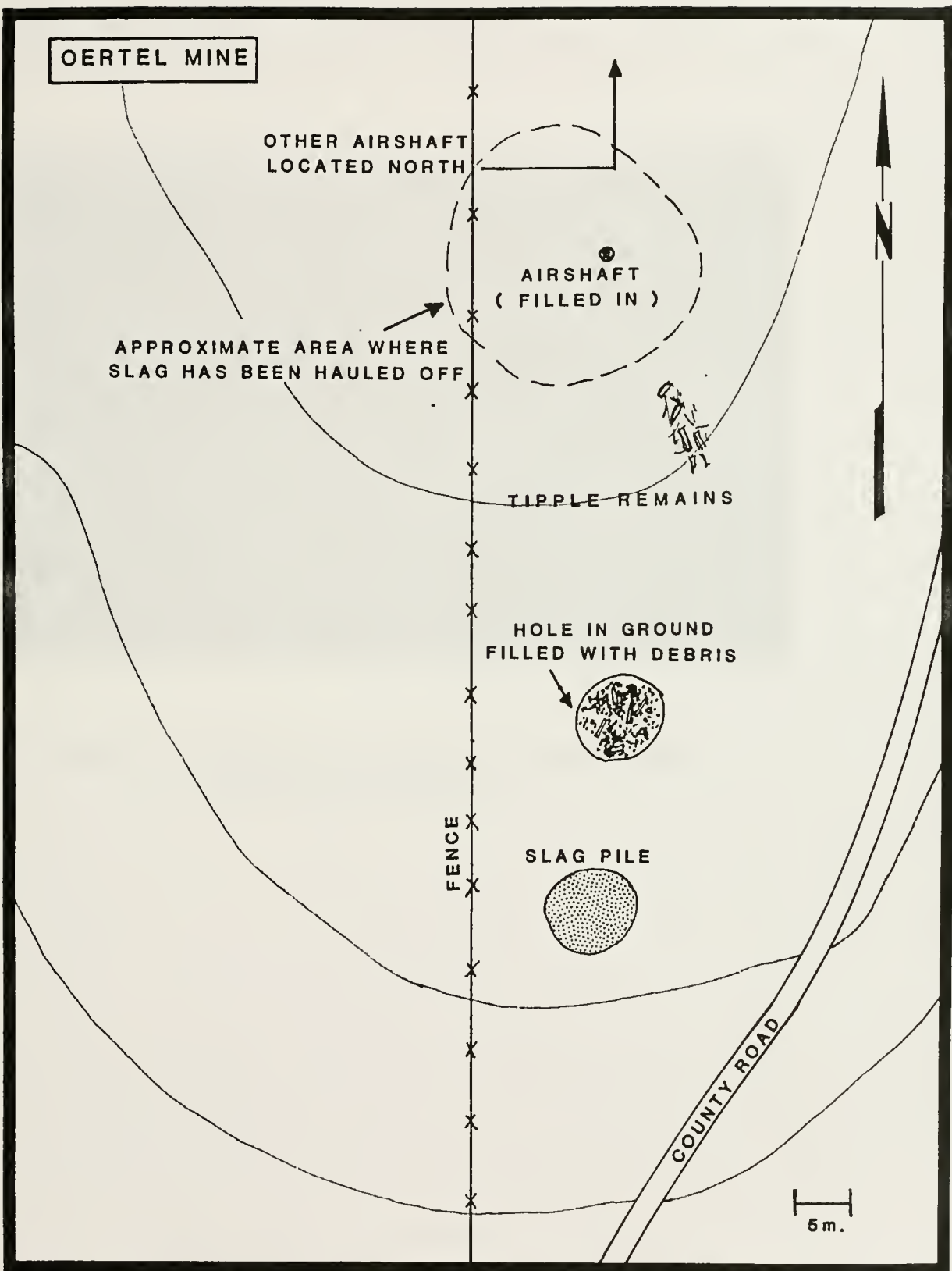


Figure 3. Site map of the Oertel Mine (24PN28).





Figure 9. Remains of the tibble at the Oertel Mine  
(view to the northwest).



## SUMMARY AND RECOMMENDATIONS

During the course of fieldwork and research for this report the following abandoned mines were examined, recorded, mapped and photographed: Torn (24-PN25), Witt (24PN26), Kellogg (24PN27) and Oertel (24PN28). Historic records for the mines were researched and local informants were interviewed whenever possible. The undisturbed areas of the sites were examined for prehistoric cultural resources. No prehistoric cultural remains were found on any of the sites.

Little published material was available on the sites and unfortunately this is one of the few coal producing areas in Montana that has not been directly examined by the United State Geological Survey, the United States Bureau of Mines or the Montana Bureau of Mines and Geology. Only two local informants could be located. Although they provided a great deal of useful information, the overall record of the mines remains sketchy at best.

The four mines examined in this report were all small, commercial operations which were in production during the same period of the 1930s and all closed about the same time at the start of U.S. involvement in World War Two. Each mine employed from eight to a dozen men although the Kellogg at peak periods hired as many as 25 miners. The thin coal seams were mined by arduous hand methods since the seams were too small to use mechanized equipment. The mine layouts were the conventional system of long rooms on both sides of a main tunnel. None of the mines appear to have used any inovative or unusual mining techniques or equipment. The mines were an important source of inexpensive fuel and jobs during the grim economic times of the Great Depression but they were not the dominant factor of the area's economy which continued to be based on agriculture.

Practially all the surface facilities at the four mines sites have been either destroyed or removed. Even when the mines were in operation, the surface structures were limited to a tipple and a few shacks for the miners and perhaps a cookhouse. In some cases the structures were on skids so they could be more easily moved onto the sites and when the mines closed they were just as easily removed. Other structures were also either removed or dismantled for salvage. Thus the physical integrity of the sites has been virtually destroyed and it appears unlikely that further information could be gained from additional work on the sites. Therefore, none of the four site examined in this report are recommended as eligible for listing on the National Register of Historic Places.

The remaining mine openings and coal waste dumps are obvious and serious threats to public safety and health. Therefore, it is recommended that the Department of State Lands be allowed to proceed on schedule with reclamation plans for the sites. If any subsurface prehistoric or historic cultural materials are revealed during the reclamation work, the office of GCM Services, Inc., in Butte and the Montana Historic Preservation Office in Helena should be notified immediately.

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Pondera History Association

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Elwanger, Floyd

1984 Personal interview, September 19, Kellogg Mine south of Valier, Montana.

Oertel, Lester

1986 Personal interview, February 13, Pendroy, Montana.

Passman, Dory

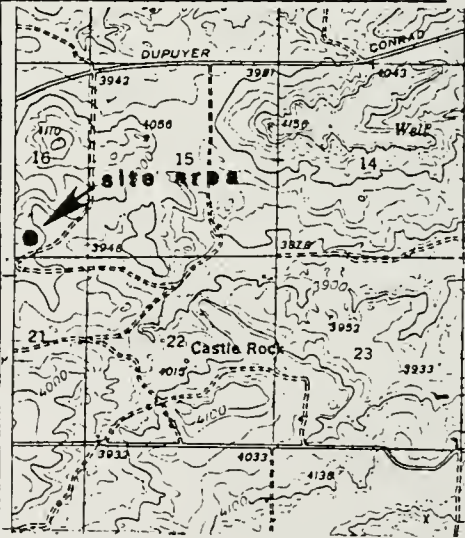
1985 Telephone communication October 7. Department of State Lands, Helena.

APPENDIX I:

Site Forms

## MONTANA CULTURAL RESOURCE INVENTORY

## Form No. 1 Locational Information

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                               |                                                                                                                                             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| 1.1 Site number:<br>24PN25                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1.2 Site name/field designation:<br>Torn Mine                                                                 | 1.3 County:<br>Pondera                                                                                                                      |
| 1.4 Township/range:<br>T 28N R 5W SW 1/4 SE 1/4 of Section 16                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                               |                                                                                                                                             |
| 1.5 UTM:<br>Zone 12 407,000 Easting 5,335,000 Northing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                               |                                                                                                                                             |
| 1.6 Site type:<br>historic coal mine                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 1.7 Recording status & comments:<br>recorded, photographed and evaluated for<br>significance in terms of NRHP |                                                                                                                                             |
| 1.8 Administrative/surface ownership:<br><br>State of Montana                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                               | 1.9 Mineral ownership:<br>State of Montana<br><br>1.10 Project name:<br>Department of State Lands<br>Abandoned Mines Reclamation<br>Program |
| 1.11 General narrative description of site:<br>The Torn Mine is situated on gentle eastward sloping grasslands leading to Spring Creek. The remains of the mine consist of a large tailings pile near the underground entrance to the mine and two smaller piles to the southeast. Remains of the tippie, scale and various machinery parts were observed. A depression marks the remains of the air shaft. A cement foundation is all that remains of the scale. The mine associated buildings and most of the equipment has been removed through the years. |                                                                                                               |                                                                                                                                             |
| 1.12 Map reference:<br>USGS Gallup City, Montana<br>1938 - 1:62,500                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                               |                                                         |
| 1.13 City/town: <input checked="" type="checkbox"/> vicinity of<br>Pendroy, Montana                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                               |                                                                                                                                             |
| 1.14 Access to site:<br>Drive 1.5 miles east of Pendroy. Follow county road to the north 6.5 miles. Follow farm road to east and cross cultivated field to the mine area to the north. Go past the first tailings pile (the Witt Mine) and over the ridge to the Torn.                                                                                                                                                                                                                                                                                        |                                                                                                               |                                                                                                                                             |

## MONTANA CULTURAL RESOURCE INVENTORY

## Form No. 2. Environmental Setting

Site Number: 24PN25

2.1 Geographic setting:

2.2 Elevation: 1230 m 4040 ft.

The Torn Mine is on the eastern slope of lands leading into the Spring Creek drainage. The lands surrounding the mine area are farmed or are in native grasses. The slope is gradual.

2.3 View/aspect:  
open2.4 Major drainage:  
Marias River2.5 Minor drainage(s):  
Spring Creek

2.6 Water sources:

|    | Names        | Distance | Ele. Change | Type & seasonality |
|----|--------------|----------|-------------|--------------------|
| a. | Spring Creek | 1 mile   | 100 ft      | perennial          |
| b. |              |          |             |                    |

2.7 Regional vegetation:  
Northern grasslands

2.8 Local vegetation:

sage, range grasses

2.9 Soils:

loam

2.10 Surface visibility/season of survey:  
good/summer

2.11 Other environmental factors pertaining to site location:

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site Number: 24PN25

3.1 Condition of site:

The site is in poor condition with little remaining from the original mining operation.

3.2 Site significance (NRHP):

Because the buildings and the equipment have been removed, the site lacks physical integrity. The significance of the Torn and the other mines in this area was that they supplied coal to the local area and were a major employer during the hard times of the 1930s. Although of some importance to the local history the lack of physical integrity suggests that the site is not eligible for the National Register of Historic Places.

☐ Attachments:

3.3 Impacts:

The DSL plans to fill in the mining shafts and the air shafts and possibly clean up the tailings piles. This will effectively remove most of the mine remains.

3.4 Recommendations:

The site has been recorded, mapped and photographed and no further work is recommended.

3.5 Site located by:  
Lynn Fredlund

3.6 Site recorded by:  
Lynn Fredlund

3.7 Revisions by:  
Paul Anderson

Date: 9/19/84

Date: 9/19/84

Date: 2/10/86

3.8 Permit No. Not applicable

3.9 Publications concerning site:

Pondera, Pondera History Association, Blueprint and Letter Company,  
Great Falls.

3.10 Artifact repository:  
none collected

3.11 Field notes/maps/photo repository:  
GCM Services, Inc.  
Butte, MT 59702

3.12 Photos & accession No:

No.

Description

View

Pondera Mines proofs  
photos #37-44

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24PN25

5.1 Site dimensions, how determined:

16,000 m<sup>2</sup>

5.2 Features:

The primary features at the site are the main tailings pile and the two outlying tailings piles. The more recent mine operations by Garrett Torn in the 1930s created the main tailings. The shaft was on the west wide of the pile, and the tippie and loading chute were on the east side. The coal was hauled up the tailings pile and over the other side to the trucks. The main tailings pile is at least 10 m above the surrounding terrain. A filled in 1.3 m x 1.3 m air shaft (now a shallow depression) is on the southwest edge of the tailings pile while the cement scale foundation is on the southeast edge. The scale foundation of poured cement is 3 m x 4 m. The building over this foundation has been removed along with almost everything else. On top of the tailings pile are the wooden remains of miscellaneous structures, plus the ties and sections of the rails.

5.3 Artifacts (observed, collected):

There are few recognizable artifacts around the Torn Mine other than the rails and wooden remains of the coal delivery system.

5.4 Historical information and evaluation:

The Torn Mine was a typical, small commerical coal mine similar to the some two dozen other mines which operated in the area during the productive period of the coal field. The land on which the mine is located was located on a school section. The mine, however, was owned and operated by Garrett Torn.

The mine was first opened during the early 1930s and operated through the decade, closing for good when the U.S. became involved in World War Two. From 10-12 men were usually employed in the mine digging the narrow foot-wide seam. The common method of the room-and-pillar technique appears to have been used in the mine. Extensive timbering was necessary in the mine due to the presence of a two-foot thick layer of muck or slag between the two coal seams which made the workings very unstable. No one, however, was reported to have been killed or badly injured in the Torn Mine during its period of production (Pondera History Association 1973; Elwanger 1984).

5.5 References: see Section 3.9

Elwanger, Floyd, personal interview, September 19, 1984, Kellogg Mine south of Valier, Montana.

Oertel, Lester, personal interview, February 13, 1986, Pendroy, Montana.  
BLM Patent Records, Billings, Montana

5.6 Subsurface testing, results, methods, etc.

none

## MONTANA CULTURAL RESOURCE INVENTORY

## Form No. 1 Locational Information

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                               |                                                                                                                                    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| 1.1 Site number:<br>24PN26                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1.2 Site name/field designation:<br>Witt Mine                                                                 | 1.3 County:<br>Pondera                                                                                                             |
| 1.4 Township/range:<br>T 28N R 5W NW 1/4 NE 1/4 of Section 21                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                               |                                                                                                                                    |
| 1.5 UTM:<br>Zone 12 407,000 Easting 5,336,000 Northing                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                               |                                                                                                                                    |
| 1.6 Site type:<br>historic coal mine                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 1.7 Recording status & comments:<br>recorded, photographed and evaluated for<br>significance in terms of NRHP |                                                                                                                                    |
| 1.8 Administrative/surface ownership:<br><br>John Angelos                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                               | 1.9 Mineral ownership:<br>private<br><br>1.10 Project name:<br>Department of State Lands<br>Abandoned Mines Reclamation<br>Program |
| 1.11 General narrative description of site:<br><br>The Witt Mine is situated on gentle eastward sloping grasslands leading to Spring Creek. The cistern, air shaft, and two dugout foundations are on the edge grassy ridge to the north of the mine. The remains of the mine consist of a large tailings pile near the underground entrance to the mine. Remains of the tipple, rails and various machinery parts are nearby. The mine associated buildings and much of the equipment has been removed through the years. |                                                                                                               |                                                                                                                                    |
| 1.12 Map reference:<br>USGS Gallup City, Montana<br>1938 - 1:62,500                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                               |                                                |
| 1.13 City/town: Pendroy, Montana <input checked="" type="checkbox"/> vicinity of                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                               |                                                                                                                                    |
| 1.14 Access to site:<br><br>Drive 1.5 miles east of Pendroy. Follow county road to the north 6.5 miles. Follow farm road to east and cross cultivated field to the mine area to the north.                                                                                                                                                                                                                                                                                                                                 |                                                                                                               |                                                                                                                                    |

# MONTANA CULTURAL RESOURCE INVENTORY

## Form No. 2. Environmental Setting

Site Number: 24PN26

|                         |                                |
|-------------------------|--------------------------------|
| 2.1 Geographic setting: | 2.2 Elevation: 1220 m 4000 ft. |
|-------------------------|--------------------------------|

The Witt Mine is on the eastern slope of lands leading into the Spring Creek drainage. The cistern, airshaft, cookhouse and a garage were located on the ridge to the north. The lands surrounding the mine are farmed or native grassland.

2.3 View/aspect:  
open

|                                     |                                        |
|-------------------------------------|----------------------------------------|
| 2.4 Major drainage:<br>Marias River | 2.5 Minor drainage(s):<br>Spring Creek |
|-------------------------------------|----------------------------------------|

2.6 Water sources:

|    | Names        | Distance | Ele. Change | Type & seasonality               |
|----|--------------|----------|-------------|----------------------------------|
| a. | Spring Creek | 1 mile   | 100 ft      | perennial                        |
| b. | Cistern      |          |             | depends totally on precipitation |

2.7 Regional vegetation:  
Northern grasslands

2.8 Local vegetation:  
sage, range grasses

2.9 Soils:  
loam

2.10 Surface visibility/season of survey:  
good/summer

2.11 Other environmental factors pertaining to site location:

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site Number: 24PN26

3.1 Condition of site:

poor - almost nothing remains of the mining operation

3.2 Site significance (NRHP):

Because the buildings and equipment have been removed the site lacks physical integrity. The significance of the Witt and the other mines in this area was that they supplied coal to the local area and were a major employer during the hard times of the 1930s. Although of some importance to the local history the lack of physical integrity suggests the site is not eligible for the National Register of Historic Places.

☐ Attachments:

3.3 Impacts:

The DSL plans to fill in the mining shafts and the air shafts and possibly clean up the tailings piles. This will effectively remove most of the mine remains.

3.4 Recommendations:

The site has been recorded, mapped and photographed.  
No further work is recommended.

3.5 Site located by:  
Lynn Fredlund

3.6 Site recorded by:  
Lynn Fredlund

3.7 Revisions by:  
Paul Anderson

Date: 9/19/84

Date: 9/19/84

Date: 2/11/86

3.8 Permit No. not applicable

3.9 Publications concerning site:

Pondera. The Pondera History Association, Blueprint and Letter Company, Great Falls, 1973.

3.10 Artifact repository:  
none collected

3.11 Field notes/maps/photo repository:  
GCM Services, Inc.  
Butte, MT 59702

3.12 Photos & accession No:

| No.                                   | Description | View |
|---------------------------------------|-------------|------|
| Pondera Mines proofs<br>photos #24-31 |             |      |

## MONTANA CULTURAL RESOURCE INVENTORY

### Form No. 5. Description of Historic Sites

Site number: 24PN26

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5.1 Site dimensions, how determined:

15,000 m<sup>2</sup>

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5.2 Features:

The primary feature of the Witt Mine is the tailings pile which are 10 m above the ground surface. The pile has an indentation from the east where the old scale and tippie were located. Also on the tailings is the remains of the shaft header and the collapsed/filled in shaft. Coming from the shaft to the south are the rails. The rails at the Witt Mine are interesting in that they are not true rails but galvanized pipe attached to 2" x 6" boards. Remains of the tippie, in the form of boards and timbers, are visible on the top of the tailings. Other features include: dugout foundation, into hillside, for cookhouse. This is on the south slope of the grassy ridge north of the mine itself. A cookstove and cement entrance slab remain to attest to the location as a cookhouse. The function was attested to by Floyd Elwanger, an old time resident of the area. The dugout area was 4 m x 5 m. (continued)

---

5.3 Artifacts (observed, collected):

Several artifacts are of interest to the Witt Mine operations. One broken coal car, pieces of an old truck, a small scale for weighing the individual coal cars, a "Faultless Malleable" cookstove, and the 1925 Chevrolet truck frame and motor which served as the motor for the mine hoist.

---

5.4 Historical information and evaluation:

The land on which the Witt Mine was located was first patented by Cora B. Helms ("formerly Cora B. Lampham") on January 20, 1914 as a homestead entry (#510096). The mine, however, was not developed until some years later being an active producer during the 1930s. The mine was begun by Glen Witt but was reported to have been under a number of different owners although a Mr. Brewster was the principal operator/owner during the mine's active period. Like most of the other small, commercial mines in the area, the Witt employed from 10 to 12 men who produced about 15 to 20 tons of coal a day from the seam some 50 to 60 feet deep. The coal was of a high sulphur content but was also high in heat value and provided an economical fuel to the area's residents during the hard times of the 1930s. The Witt and the other similar mines were also important for the jobs they provided. Many of the seasonal miners were local farmers who needed to supplement their meager farm incomes. The mine operated for about a decade, closing for good during the early 1940s (Pondera History Association 1973; Elwanger 1984).

---

5.5 References: see Section 3.9

Elwanger, Floyd. Personal interview, September 19, 1984. Kellogg mine south of Valier, Oertel, Lester. Personal interview, February 13, 1986, Pendroy, Montana  
BLM Patent Records, Billings, Montana.

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5.6 Subsurface testing, results, methods, etc.:

none

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- depression which is filled in air shaft. The airshaft was 4 ft x 4 ft in diameter and was 90 ft deep and is just west of the cookhouse.
- dugout area 6 m x 6 m had a structure built over the top which was sort of a garage according to Elwanger. This is west of the airshaft also on the south side of the ridge.
- cement cistern. This feature is 2.8 m in interior diameter and 3.9 m outside diameter. A wooden frame (.6 x .6 m) in the top center provides a view of the interior, as does a broken edge. It is approximately 2.5 m deep. The cistern was constructed on site and the remains of the form are still visible on the northeast corner of the tailings pile.

## MONTANA CULTURAL RESOURCE INVENTORY

## Form No. 1 Locational Information

|                            |                                                  |                        |
|----------------------------|--------------------------------------------------|------------------------|
| 1.1 Site number:<br>24PN27 | 1.2 Site name/field designation:<br>Kellogg Mine | 1.3 County:<br>Pondera |
|----------------------------|--------------------------------------------------|------------------------|

1.4 Township/range:

T 28N

R 5W

NE 1/4 SW1/4 SW 1/4 of Section 21

1.5 UTM:

Zone 12 407,500 Easting 5,335,000 Northing

|                                      |                                                                                                                                      |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| 1.6 Site type:<br>historic coal mine | 1.7 Recording status & comments:<br>The site has been recorded, mapped, photographed and evaluated for significance in terms of NRHP |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|

|                                                                          |                                                                                           |
|--------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| 1.8 Administrative/surface ownership:<br><br>John Angelos<br>Pendroy, MT | 1.9 Mineral ownership:<br>private                                                         |
|                                                                          | 1.10 Project name:<br>Department of State Lands<br>Abandoned Mines Reclamation<br>Program |

1.11 General narrative description of site:

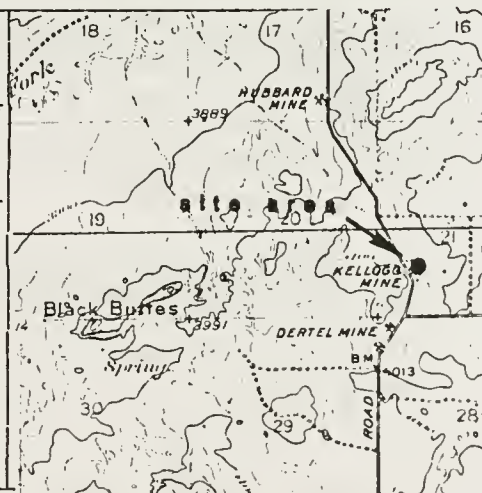
The Kellogg Mine is situated on gentle eastward sloping grasslands leading to Spring Creek. The remains of the mine consist of a large tailings pile near the underground entrance to the mine. Remains of the tipple, scale and various machinery parts are nearby. Depressions mark the remains of five buildings and an air shaft. Approximately 100 m NE is another tailings pile. Two standing structures, a small dwelling and a granary, are not related to the mining operations. The mine associated buildings, much of the equipment and some of the tailings have been removed through the years.

1.12 Map reference:  
USGS Pendroy, Montana  
1936 - 1:62,500

1.13 City/town: ☒ vicinity of  
Pendroy, Montana

1.14 Access to site:

Drive 1.5 miles east of Pendroy. Follow county road to the north 6.3 miles. Mine is on east side of road.



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site number: 24PN27

3.1 Condition of site:

The site condition is poor with little remaining of the original mining operation.

3.2 Site significance (NRHP):

Because the buildings, the equipment and some of the tailings have been removed the site lacks physical integrity. The significance of the Kellogg and the other mines in this area was that they supplied coal to the local area and were a major employer during the hard times of the 1930s. Although of some importance to the local history the lack of physical integrity suggests that the site is not eligible for the NRHP.

☐ Attachments:

3.3 Impacts:

The DSL plans to fill in the mining shafts and the air shafts and possibly clean up the tailings piles. This will effectively remove most of the mine remains.

3.4 Recommendations:

Although impact through the mine reclamation will remove most of the remains of the Kellogg Mine there is no further information to be gained from the physical remains. The site has been recorded, mapped and photographed and no further work is recommended.

3.5 Site located by:

Lynn Fredlund

Date: September 19, 1984

3.6 Site recorded by:

Lynn Fredlund

Date: September 19, 1984

3.7 Revisions by:

Paul Anderson

Date: February 11, 1986

3.8 Permit No. Not applicable

3.9 Publications concerning site:

Pondera, Pondera History Association, Blueprint & Letter Company, Great Falls, 1973.

3.10 Artifact repository:  
none collected

3.11 Field notes/maps/photo repository:  
GCM Services Inc.  
Butte, MT

3.12 Photos & accession No:

No. E. MT Mines proofs  
photos #2-22  
#49-54

Description  
Add list from photo form

View

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24PN27

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5.1 Site dimensions, how determined:

20,000 m<sup>2</sup>

---

5.2 Features:

The features at the site consist of eight depressions, one concrete motor mount, the remains of two tailings piles, the remains of the scale and two standing structures. The standing structures are both 2 m x 4 m and cedar shingle sided. One is the dwelling of Floyd Elwanger, who once owned the Kellogg and the other is a granary. Neither was part of the Kellogg Mine facilities when the mine was in operation..

Feature 1. Dugout foundation for the Kellogg/Hansman house. The foundation is approximately 4 m x 6 m. The house was moved to the Angelo's farm south of the site.

Feature 2. Dugout area 2 m x 2 m. Function unknown.

Feature 3. Dugout area 9 m x 6 m. Elwanger reports that this was the bunkhouse. This structure apparently was also moved and is at the Angelo farm.

Feature 4. Depression of approximately 8 m x 8 m. This is the filled in shaft of the Kellogg Mine. At its extreme west-southwest end it abutted the Oertel Mine property. Depth of the shaft is unknown but it slanted back into the hillside. The length of cable on the hoist was 200 ft and fully extended into the underground operations, according to Elwanger.  
(continued)

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5.3 Artifacts (observed, collected):

There were many pieces of machinery, an old threshing machine, Floyd's grain grinder, Floyd's old trucks, a sign, and assorted scrap metal. Most of the machinery and anything possibly salvagable has been removed.

---

5.4 Historical information and evaluation:  
see attached

---

5.5 References (see Section 3.9)

Elwanger, Floyd, Personal interview, 9-19-84. Kellogg Mine south of Valier, BLM Patent Records, Billings, Montana.

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5.6 Subsurface testing, results, methods, etc.  
none

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- Feature 5. Area of scale. Wooden remains of scale foundation are 7 m square. Portions of roof, possibly of scale house, are to the south and include the rafters.
- Feature 6. Depression 3 m x 4 m. This, according to Mr. Elwanger, was where one of the converted oil field "cookhouses" once stood. These were apparently used as trailers by families. This one was sold to the Hutterites.
- Feature 7. Depression is 4 m x 6 m. The building which stood here was one of the dwellings of the Kellogg family. This was moved to the Angelo's farm.
- Feature 8. A slight depression which represents the filled in air-shaft. The shaft is 53 ft deep. The other airshaft is in the cultivated field to the south, according to Elwanger.

The main tailings pile is oriented according to the direction of the shaft -- southwest/northeast. It is approximately two meters high and has a dugout area for loading in the center. The shaft is at the southwest end and rails still lie on top of the pile. The remains of the tipple and the scale are visible at the east end. The hoist still remains and was powered by a 1928 Chevrolet truck motor.

The Kellogg Mine was run by Les Kellogg and employed at least a dozen men during the 1930s. The Kellogg Mine was the largest of the some two dozen mines which dotted the area. The mine was first opened around 1930 although the land had been patented about 15 years earlier by Charles B. Sanborn who obtained a homestead entry (#378274) on January 20, 1914. The mine was started by Les O. Kellogg and at peak times as many as 25 men worked the mine. Shortly after it opened the mine suffered a fatal accident when Theodore Vandepas was killed in a cave-in. At this time the main tunnel of the mine was reported to be 300 feet in length.

On the surface there were about six shacks for the miners who had families, a bunk house for the single miners and a cook house. Coal was sold at the mine to customers who drove their own wagons or trucks. They paid about \$6.50 a ton for the coal but those who arrived around noon were also invited to a free lunch. Coal was also delivered to area towns and farms by Glen Kellogg in a three-ton truck for an additional \$2.00 per ton charge.

The mine, like most of the others, closed in the early 1940s but then was bought by Floyd Elwanger in February, 1945. Elwanger hoped to resume operations and began cleaning out the mine but then his health failed and he was forced to abandon the project (Pondera History Association 1973; Elwanger 1984; The Independent Observer June 12, 1930).

## MONTANA CULTURAL RESOURCE INVENTORY

## Form No. 1 Locational Information

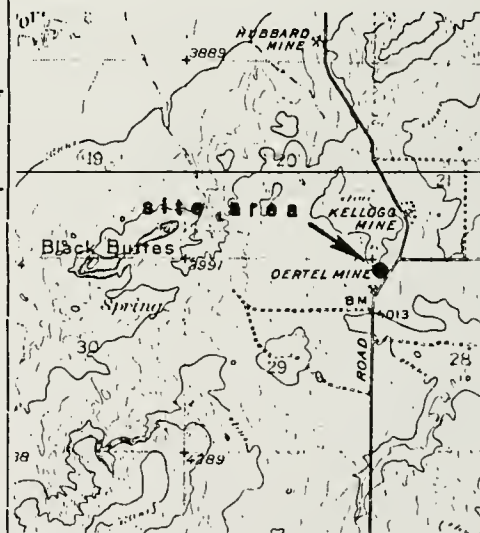
|                                                                           |                                                                                         |                                                                                           |
|---------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| 1.1 Site number:<br>24PN28                                                | 1.2 Site name/field designation:<br>Oertel Mine                                         | 1.3 County:<br>Pondera                                                                    |
| 1.4 Township/range:<br>T 28N R 5W NW 1/4 NW1/4 NW 1/4 of Section 28       |                                                                                         |                                                                                           |
| 1.5 UTM:<br>Zone 12 Easting Northing                                      |                                                                                         |                                                                                           |
| 1.6 Site type:<br>historic coal mine                                      | 1.7 Recording status & comments:<br>The site has been recorded, mapped and photographed |                                                                                           |
| 1.8 Administrative/surface ownership:<br>John Angelos<br>Pendroy, Montana |                                                                                         | 1.9 Mineral ownership:<br>private                                                         |
|                                                                           |                                                                                         | 1.10 Project name:<br>Department of State Lands<br>Abandoned Mines Reclamation<br>Project |
| 1.11 General narrative description of site:                               |                                                                                         |                                                                                           |

The Oertel Mine is situated on eastward sloping grasslands leading into the Spring Creek valley. The county road runs just east of the mine area. Two depressions, and some wood and metal. The air shafts were filled in and the tailings removed by the county. Only scattered slag and debris mark the existence of Oertel.

|                                                                 |                                                 |
|-----------------------------------------------------------------|-------------------------------------------------|
| 1.12 Map reference:<br>USGS Pendroy, Montana<br>1936 - 1:62,500 |                                                 |
| 1.13 City/town:<br>Pendroy, Montana                             | <input checked="" type="checkbox"/> vicinity of |

## 1.14 Access to site:

Drive 1.5 miles east of Pendroy. Follow county road to the north 6.0 miles. Mine is on west side of road below fence.



# MONTANA CULTURAL RESOURCE INVENTORY

## Form No. 2. Environmental Setting

Site Number: 24PN28

2.1 Geographic setting:

2.2 Elevation: 1240 m 4080 ft.

The Oertel Mine is on the eastern slope of lands leading into the Spring Creek drainage. The lands surrounding the mine area are farmed or in native grasses. The area of the mine is between the road and the fence-line.

2.3 View/aspect:  
open

2.4 Major drainage:  
Marias River

2.5 Minor drainage(s):  
Spring Creek

2.6 Water sources:

|    | Names        | Distance  | Ele. Change | Type & seasonality |
|----|--------------|-----------|-------------|--------------------|
| a. | Spring Creek | 1.5 miles | 100 ft      | perennial          |
| b. |              |           |             |                    |

2.7 Regional vegetation:  
Northern grasslands

2.8 Local vegetation:  
sage, range grasses

2.9 Soils:  
loam

2.10 Surface visibility/season of survey:  
good/summer

2.11 Other environmental factors pertaining to site location:

# MONTANA CULTURAL RESOURCE INVENTORY

## Form No. 3 Site Assessment and Recording Documentation

Site Number: 24PN28

### 3.1 Condition of site:

poor - almost nothing remains of the original mine

### 3.2 Site significance (NRHP):

Because the buildings, equipment and all of the tailings have been removed the site lacks physical integrity. The significance of the Oertel and the other mines in this area was that they supplied coal to the local area and were a major employer during the hard times of the 1930s. Although of some importance to the local history the lack of physical integrity suggests that the site is not eligible for the National Register of Historic Places.

☐ Attachments:

### 3.3 Impacts:

The DSL plans to fill in the mining shafts and the air shafts and possibly clean up the tailings piles. This will effectively remove most of the mine remains.

### 3.4 Recommendations:

There is almost nothing left of the Oertel and there is no further information to be gained. No further work is recommended.

3.5 Site located by:  
Lynn Fredlund

3.6 Site recorded by:  
L. Fredlund

3.7 Revisions by:  
Paul Anderson

Date: 9/19/84

Date: 9/19/84

Date: 2/12/86

3.8 Permit No. not applicable

### 3.9 Publications concerning site:

Pondera. Pondera History Association, Blueprint & Letter Company, Great Falls, 1973.

3.10 Artifact repository:  
none collected

3.11 Field notes/maps/photo repository:  
GCM Services, Inc.  
Butte, Montana

### 3.12 Photos & accession No:

No.

Description

View

E. MT Mines proofs  
photos #47-48

## MONTANA CULTURAL RESOURCE INVENTORY

### Form No. 5. Description of Historic Sites

Site number: 24PN28

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#### 5.1 Site dimensions, how determined:

Determined by the few remaining depressions and debris. The second air shaft is outside of this area.

1000 m<sup>2</sup>

---

#### 5.2 Features:

Three features were visible on this site. The first is a depression which according to Floyd Elwanger was one of the deep air shafts which was filled. It is surrounded by a surface cover of coal slag indicating that at one time this was an area where the tailings were dumped. To the south of the airshaft (30 m) is a 6 m diameter hole which is used as a dump. It probably had something to do with the mine but its function is not known. Below the dump is a small slag pile. Floyd Elwanger said that all the tailings have been removed from the Oertel over the years.

---

#### 5.3 Artifacts (observed, collected):

The material remains of the Oertel are very limited. Besides the modern dump there is a bed frame near the air shaft and some wood boards and timbers.

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#### 5.4 Historical information and evaluation:

The Oertel Mine was owned and operated by Paul O. Oertel who started the mine around 1927. The land on which the mine was located, however, was first acquired by Earl M. Gilson under a homestead patent (#531519) on May 31, 1916. The incline shaft was sunk 190 feet, according to Oertel's son, Lester Oertel, at a 35° incline to reach the coal seam about 50 to 60 feet below. The mine workings extended 200 to 300 feet from the shaft and a type of long-wall method was used where the seam was mined from long rooms on each side of the four-foot high main drift. The coal was found in two seams. The bottom seam was about a foot thick while the top was about six inches and they were separated by a foot to two foot thick layer of slag or muck. Lester Oertel, who worked in the mine, said the bottom seam would be removed first by the miner who had to lay on his side. Then the waste layer would be taken out and finally the top coal seam would be taken out by the miner who, at this point, at least had room to kneel. No machines could be used because of the cramped space and the mine cars had to be pushed by hand. Oertel reported that blasting was seldom used but occasionally it would be done using black powder wrapped in Saturday Evening Post magazines. Ventilation for the mine was by an air shaft and like most of the other mines in the area there was no forced air system in use which resulted in such poor air at the workings that miners sometimes had trouble keeping their carbide lamps lit (BLM Patent Records; Oertel 1986). (continued)

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#### 5.5 References

(see Section 3.9)

Elwanger, Floyd. Personal interview, 9-19-84. Kellogg Mine south of Valier.  
Oertel, Lester. Personal interview, 2-13-1986. Pendroy, Montana.  
BLM Patent Records, Billings, Montana

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#### 5.6 Subsurface testing, results, methods, etc.

none

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However, in spite of the difficult, dangerous work, the mine did provide jobs for eight to ten men during the hard-pressed 1930s. For their work the miners received an average of \$3.75 per ton. Since each man was able to mine about one to one and a half tons a day, their daily wage ran about four to five dollars which was an important source of income for miners and area farmers who supplemented their meager incomes by also working in the mine (Pondera History Association 1973).

The Oertel had a somewhat troubled history. A number of serious injuries occurred in the mine and in 1938 Charles Preston was killed in a cave-in. The mine continued to operate through the 1930s, however, but like the others it closed around 1941 (Oertel 1986).